

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 4. This sheet replaces the original sheet including Fig. 4.

Attachment: Replacement Sheet including Fig. 4.

REMARKS

This Response is to the non-final Office Action mailed April 19, 2005. Claim 1 to 49 were pending in this application. Claims 16 to 49 were withdrawn previously without prejudice or disclaimer. Of those claims, Claims 16 to 23 and 42 to 44 have been canceled herein without prejudice or disclaimer. Claim 12 has also been canceled herein without prejudice or disclaimer. Applicants expressly reserve the right to file and prosecute Claims 12, 16 to 23 and 42 to 44 as originally written in one or more continuation application. Claims 1 to 15 stand rejected.

In this Response Claims 1, 7 and 13 have been amended. Claims 50 to 60 have been added. It is believed that because the number of independent and dependent claims added correspond to the number of such claims canceled without prejudice or disclaimer that no fee is due in connection with the added claims. Please however charge Deposit Account No. 02-1818 for any fees owed. The written description has been amended in various places for minor grammatical reasons. Fig. 4 is being replaced to correct minor element number errors. No new matter has been introduced by way of any of the amendments or additions.

Applicants note that the Information Disclosure Statement filed January 7, 2005 has not been initialed (please note that the date on the Information Disclosure Statement January 7, 2004 should instead be January 7, 2005). For convenience, a copy of Form 1449 for such Information Disclosure Statement is enclosed herewith.

In the Office Action, Claim 1 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,429,602 to Hauser ("*Hauser*"). Claim 1 was also rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,898,578 to Rubalcaba Jr. ("*Rubalcaba*"). Claims 2 to 15 were rejected under 35 U.S.C. § 103(a) as being obvious in view of *Hauser* and *Rubalcaba*.

Both *Hauser* and *Rubalcaba* disclose fluid pumping systems that can control multiple pumps at the same time. There is a fundamental difference, however, between the system of the present invention and the pumping systems of *Hauser* and *Rubalcaba*. The pumping system of the present invention involves the interrelatedness of the various fluids being pumped. This interrelatedness is discussed throughout the Specification for example as shown and discussed in connection with Figs. 4 and 5.

Renal failure therapies, such as hemodialysis, hemofiltration, and peritoneal dialysis perform two functions in general. First they remove waste from the patient, which has collected since the last treatment. Second, the treatments remove an amount of fluid from the patient, typically called ultrafiltrate. These are the two primary functions of the kidneys, which dialysis or hemofiltration machines attempt to replace.

It is important in dialysis or other blood treatment therapy that an overall net volume of fluid is removed from the patient after treatment is completed. As shown in the specification, the fluid balancing can involve multiple fluids that are pumped into the patient as well as the ultrafiltrate that is removed the patient. The present invention provides a system and method for conveniently and accurately controlling fluids pumped from the machine and from remote pumps, such as remote infusion pumps, so that at the end of treatment the proper amount of ultrafiltrate is removed from the patient.

Hauser and *Rubalcaba* provide no hint or clue as to the control of multiple fluids into and/or out of the patient so that a net overall volume of fluid is added or removed from the patient. *Hauser* and *Rubalcaba* instead provide a controller that can control multiple independently operating pumps. There is no disclosure, hint or suggestion to combine the flowrates of the pumps so as to be able to control the overall amount of fluid delivered to or removed from the patient.

Hauser and *Rubalcaba* describe infusion systems and in no way disclose, teach or suggest a dialysis or blood treatment system. Moreover the references alone or in combination do not disclose, hint, suggest or provide any motivation for combining their infusion systems with a dialysis or blood therapy machine. Further, the references alone or in combination do not disclose, hint or suggest the specific language described in the claims for synchronizing the flow rates of multiple pumps.

Claim 1 as presently presented identifies a blood treatment machine that includes a blood cleansing device. As discussed, the systems of *Hauser* and *Rubalcaba* do not teach or suggest a blood treatment machine having a blood cleaning device. Claim 1 includes a pump located on-board the blood treatment machine. Because *Hauser* and *Rubalcaba* do not disclose, teach or suggest a blood treatment machine, they likewise cannot teach or suggest a pump provided on-board such machine.

Claim 1 also includes a second pump residing externally from the machine. Because *Hauser* and *Rubalcaba* do not alone or together teach or suggest a blood treatment machine including a blood cleansing device, they cannot teach a pump residing externally from such machine. Moreover, there is absolutely no disclosure in either *Hauser* or *Rubalcaba* to provide a blood treatment machine and a controller that controls both the flow of a first fluid pumped by an on-board pump and the flow of a second fluid pumped by the external second pump.

Further, Claim 1 includes an operator interface in communication with the controller, wherein the interface is operable to receive information inputted from an operator and communicate that information to the controller, wherein the controller can control the on-board and second external pump to pump the first and second fluids using the information. *Rubalcaba* and *Hauser* do not disclose teach or suggest an operator interface that enables an operator to enter information concerning a pump located on-board a blood treatment machine as well as a pump located externally from the machine. *Hauser* and *Rubalcaba* provide no hint or suggestion as to how to control such on-board and external pumps. For each of the foregoing reasons, Applicants respectfully submit that Claim 1 and Claims 2 to 15 that depend from Claim 1 are patentable with respect to *Hauser* and *Rubalcaba*.

The patentability of Claim 1 renders moot the obviousness rejection of Claims 2 to 15. Similarly, *Hauser* and *Rubalcaba* are deficient alone or in combination with respect to new Claims 50 to 60. Claims 7 and 13 were amended for minor reasons not related to patentability.

For all the foregoing reasons, Applicants respectfully submit that the above-identified patent application is in condition for allowance and earnestly solicit reconsideration of same.

Respectfully submitted,

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Enclosures: Replacement Fig. 4 and copy of 1/7/05 IDS 1449.